

the lingual gland, the unpaired subœsophageal gland of the Decapods, and the extra-bulbar pair of the Octopods are constructed upon the same type; they are bunches of *acini* formed by rather short cylindrical cells, filled in their inferior third with protoplasm with a large nucleus; the protoplasm is continued as a network in the middle third, and the rest is filled with rather large granules, which stain strongly. They much resemble the serous cells of Vertebrates. On the other hand, the pair of abdominal glands consist of large conical cells, the narrow lower part of which contains protoplasm, while the upper two thirds are filled with large balls of mucus, which does not stain with the same reagents as the inferior third; these large caliciform cells emit through their wide apertures the balls of mucus which become fused into a uniform mass in the excretory ducts, showing a remarkable analogy with the mucous cells of the higher Vertebrata.

The above is the fundamental structure of the salivary elements, but their arrangement differs greatly in the two great divisions of the Cephalopoda. In the Decapods the abdominal gland is small and formed of *acini*, like the other glands; but in the Octopods it is very large, and it is a tubular gland which may be broken up by the action of chloride of gold. It is formed by a tube indefinitely divided dichotomously, nearly equal in diameter throughout its whole extent, except in the final branches, which are smaller. The terminal tubular branches are clothed with a single layer of muscular fibres forming very regular and well-marked rings, the action of which is clearly to drive the mucus towards the excretory duct. All the tubes are twisted together inextricably, the spaces between them being occupied by connective fibres, large stellate cells, or free spaces through which the blood circulates.

The author adds that he has investigated the embryogeny of these glands and completed the researches of Bobretzky in many points.—*Comptes Rendus*, July 18, 1887, p. 177.

*Habitat of Peripatus Leuckarti.* By Prof. F. JEFFREY BELL.

Dr. E. P. Ramsay, F.R.S.E., has lately been so kind as to send me two specimens of *Peripatus Leuckarti*, Sanger. Prof. Leuckart's only information with regard to the place of origin of his specimen was "Neu Holland." It may therefore be of interest to state that Mr. Ramsay's examples were taken in the Queensland Scrubs, near Wide Bay. Sanger's paper being almost inaccessible, and, moreover, being written in Russian, I am glad to be able to add that Mr. Adam Sedgwick, F.R.S., will incorporate observations on the specimens sent me by Mr. Ramsay in his forthcoming monograph on the genus. Now that Mr. Ramsay has led the way, it is to be hoped more specimens of *Peripatus* may be sent from Australia to this country.